SECTION 6.0

Other CEQA Required Considerations

6.0 Other CEQA Required Considerations

The California Environmental Quality Act (CEQA) requires the discussion of significant irreversible environmental changes, growth-inducing impacts, and areas of unavoidable significant environmental impacts for the Proposed Action, Alternative 1-Alternative Transmission Line Corridor, Alternative 2-Alternative Transmission Line Corridor, Alternative 3-Reduced Solar Energy Facility Site, and Alternative 4-No Action/No Project Alternative. The following discussion addresses these issues as they relate to the development of the Proposed Action.

6.1 Proposed Action

6.1.1 Significant Irreversible Environmental Changes

A. CEQA

Section 15126 (c) of the CEQA Guidelines requires that an EIR address any irreversible changes to the environment that may result from the implementation of the Proposed Action. Several irreversible commitments of limited resources would result from implementation of the Proposed Action. Such resources include, but are not limited to: the loss of lumber, sand, gravel, concrete, asphalt, petrochemical construction materials, steel, copper, lead and other metals, and water consumption.

However, the Proposed Action would provide a clean, renewable energy resource. The Proposed Action would implement many Federal, State, and Local goals and policies directed at moving away from reliance upon fossil fuels, and encouraging renewable energy. These goals and polices are identified in Chapter 1.0 of this EIR/EA. Moreover, the land proposed for the solar energy facility is subject to a long-term lease agreement. Under the lease agreement, the applicant is required to restore the land to its pre-project state at the end of the project term.

B. NEPA

The National Environmental Policy Act (NEPA) requires an analysis of the significant irreversible effects of a Proposed Action. Resources irreversibly or irretrievably committed to a Proposed Action are those used on a long-term or permanent basis. This includes the use of nonrenewable resources such as metal, wood, fuel, paper, and other natural resources. These resources are considered nonretrievable in that they would be used for a Proposed Action when they could have been conserved or used for other purposes. Another impact that falls under the category of irreversible and irretrievable commitment of resources is the unavoidable destruction of natural resources.

The Imperial Solar Energy Center West would irretrievably commit resources over the 30-year life of the project. After 30 years, the project is planned to be decommissioned and the applicant is required to restore the land to its pre-project state. Some of the resources on the site could potentially be retrieved after the site has been decommissioned.

However, the project would provide a clean, renewable energy resource. Over the 30 year life of the project, this renewable energy project would contribute incrementally to the reduction in demand for fossil fuel use for electricity-generating purposes. Therefore, the incremental reduction in fossil fuels would be a positive effect of the commitment of nonrenewable resources.

6.1.2 Growth Inducing Impacts

A project is regarded as growth-inducing if it can foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment (CEQA Guidelines §15126.2[d]). Included in this definition are projects that would remove obstacles to population growth, such as extending public services into areas not previously served. Growth inducement can also be defined as an action that would encourage an increase in density of development in surrounding areas or encourage adjacent development. Growth should not be assumed to be beneficial, detrimental, or of little significance to the environment (CEQA Guidelines §15126.2[d]).

The Proposed Action is located within the unincorporated area of Imperial County. The Proposed Action does not involve the development of permanent residences that would result in a direct population growth in the area. The Proposed Action is the construction and operation of a solar facility and transmission line corridor. According to the Applicant, the construction workforce is expected to reach a peak of approximately 285 temporary workers with hours generally between 7am and 3pm Monday through Friday. The construction of the Proposed Action is expected to require approximately 17 months. After the construction of the Proposed Action, no permanent construction workers would be hired. The project would only require the employment of four full-time personnel and one security guard for the operation of the solar facility. As such, the Proposed Action would not induce substantial population growth in the area. The Proposed Action will involve only the extension of electricity-related infrastructure off-site. This would be limited to the extension of the transmission lines from the solar energy facility to the Imperial Valley Substation. These transmission lines would serve regional energy needs, integrating into the grid, and would not be available to directly serve surrounding areas.

While the Proposed Action would contribute to energy supply, which indirectly supports population growth, development of the Proposed Action is a response to the State's need for renewable energy to meet its Renewable Portfolio Standard. Unlike a gas-fired power plant, the Proposed Action is not being developed as a source of base-load power in response to growth in demand for electricity. The power generated would be added to the State's electricity grid with the intent that it would displace fossil fueled power plants and their associated environmental impacts.

The Proposed Action would supply energy to accommodate and support existing demand and projected growth, but it would not foster any new growth because (1) the additional energy would be used to ease the burdens of meeting existing statewide energy demands within and beyond the area of the project; (2) the energy would be used to support already-projected growth; or, (3) the factors affecting growth are so diverse that any potential connection between additional energy production and growth would necessarily be too speculative and uncertain to merit further analysis.

Under CEQA, an EIR should consider potentially significant energy implications of a project. (See CEQA Guidelines Appendix F(II); Pub. Res. Code Section 21100(b)(3)). Under NEPA, indirect effects including growth-inducing effects must be analyzed. (See 40 CFR Section 1508.8(b). However, the relationship between the Proposed Action's increased electrical capacity and the growth-inducing impacts outside the surrounding area is too speculative and uncertain to warrant further analysis. When a project's growth-inducing impacts are speculative, the lead agency should consider 14 Cal Code Regs §15145, which provides that, if an impact is too speculative for evaluation, the agency should note this conclusion and terminate discussion of the impact. As the court explained in *Napa Citizens for Honest Gov't v. Napa County Board of Supervisors* (2001) 91 Cal. App.4th 342, 368: "Nothing in the Guidelines, or in the cases, requires more than a general analysis of projected growth." *Napa Citizens, 91* CA4th at 369. The problem of uncertainty of the Proposed Action's growth-inducing effects cannot be resolved by collection of further data due to the diversity of factors affecting growth.

While this document has considered that the Proposed Action, as an energy project, might foster regional growth, the particular growth that could be attributed to the Proposed Action is unpredictable, given the multitude of variables at play, including uncertainty about the nature, extent, and location of growth and the effect of other contributors to growth besides the Proposed Action. No accurate and reliable data is available that could be used to predict the amount of growth outside the area that would result from the Proposed Action's contribution of additional electrical capacity. Neither the BLM nor the County of Imperial has adopted a threshold of significance for determining when an energy project is growth-inducing. Further evaluation of this impact is not required under CEQA or NEPA.

Additionally, the project would not involve the development of any new roadways, new water systems, or sewer. Potable water would be trucked into the site to serve the Operations and Maintenance Building. The Operation and Maintenance Building will be served by a septic system. Therefore, infrastructure improvements to serve the project are limited and would not be available to serve surrounding areas. For these reasons, the project would not be growth-inducing.

6.1.3 Unavoidable Significant Environmental Impacts

Analysis of environmental impacts caused by the Proposed Action has been performed, and is contained in Chapter 4.0. Where significant impacts have been identified, mitigation measures are proposed that when implemented, would reduce the impact to a level less than significant under CEQA. The following is a summary of the impacts and mitigation measures contained for each subject area in Chapter 4.0-Environmental Consequences. No unavoidable significant environmental impacts were identified.

6.1.3.1 Land Use

The land use plans that are applicable to the project site include the County of Imperial General Plan, the County of Imperial Land Use Ordinance, Airport Land Use Compatibility Plan, Federal Land Management Act, 1976, California Desert Conservation Area Plan, and Yuha Basin Area of Critical Environmental Concern (ACEC) Management Plan and Flat-tailed Horned Lizard Rangewide Management Strategy. As discussed in EIR/EA Section 4.2, the Proposed Action would not conflict with any of the abovementioned

applicable land use plans. Therefore, no significant impact under CEQA is identified associated with this issue.

Potential impacts to biological resources will occur with implementation of the Proposed Action. However, Mitigation Measures B2 and B3 have been identified to address potential direct and indirect impacts to biological resources located within the Yuha Basin Area of Critical Environmental Concern Management Plan.

6.1.3.2 Air Quality

As discussed in EIR/EA Section 4.4, neither the construction emissions, nor the increase in ADT as a result of the Proposed Action, would result in a significant air quality impact under CEQA to the surrounding area. However, a significant impact under CEQA would result if the Grading Emissions phase were to remain unmitigated at the Tier 0 Baseline. With implementation of the Tier 2+ engine technology, NOx emissions would not exceed ICAPCD's threshold. Implementation of Mitigation Measures AQ1 and AQ2 would reduce this impact to a level less than significant under CEQA.

6.1.3.3 Greenhouse Gas Emissions

As discussed in EIR/EA Section 4.5, the estimated criteria pollutants generated during the construction and operation of the Proposed Action would not exceed the CEQA threshold of 25,000 metric tons or more of CO_{2e} GHG emissions on an annual basis and the CAPCOA and CARB threshold of 900 metric tons of CO_2 per year. However, the Proposed Action shall demonstrate that it has policies in place that would assist in providing a statewide reduction in CO_2. The greenhouse gas offset measures provided in EIR/EA Section 4.5 have been shown to be effective by CARB and should be implemented wherever possible.

6.1.3.4 Geology/Soils and Mineral Resources

As discussed in EIR/EA Section 4.6, the Proposed Action project site is likely to be subject to at least one moderate earthquake during the design of the structures. However, the Proposed Action must comply with the most recent California Building Code Requirements.

The site-specific geology impacts that have the potential to occur on the project site include differential settlement, and the presence of expansive and corrosive soils. These geology impacts are considered significant under CEQA. However, with the implementation of Mitigation Measure GS1, these impacts would be reduced to a level less than significant under CEQA.

6.1.3.5 Cultural Resources

As discussed in EIR/EA Section 4.7, 16 sites are located within the Proposed Action APE. Of the 16 sites within the project APE, three sites would be directly impacted during construction of the Proposed Action. Eleven sites would be indirectly impacted due to increased traffic and the potential increase in the amount of runoff during rainfall events. In addition, during operation of the Proposed Action, repairs to buried utilities or other buried infrastructure could require the excavation of trenches or large pits. Subsurface excavation activities always have some potential to impact previously unknown archaeological subsurface resources. During construction and operational repair of the Proposed Action, grading, excavation and trenching will

be required. There is a potential impact that human remains may be disturbed. With the implementation of Mitigation Measures CR1 through CR4, these cultural resources impacts would be reduced to a level less than significant under CEQA.

6.1.3.6 Health, Safety and Hazardous Materials/Fire and Fuels Management

As discussed in EIR/EA Section 4.10, the project site contains some areas where hazardous materials may be present. These include the potential presence of pesticide/herbicide residue and scattered trash and debris. None of these appear to represent a substantial health risk on the project site and to the surrounding area, and with the implementation of recommended Mitigation Measures HM1 and HM2, potential impacts will be reduced to a level less than significant under CEQA.

6.1.3.7 Hydrology and Water Quality

As discussed in EIR/EA Section 4.11, the Proposed Action would not result in a significant hydrology impact. Onsite drainage will be designed to replicate the existing conditions and the project site will maintain all existing condition points of discharge. The construction of drainage infrastructure will reduce peak flow rates.

Contamination associated with urban non-point source pollution could enter the on-site detention basins as a result of construction or post-construction-related activities, resulting in potentially significant water quality impacts under CEQA. However, with the implementation of Mitigation Measure HWQ1, potential impacts will be reduced to a level less than significant under CEQA.

6.1.3.8 Biological Resources

As discussed in EIR/EA Section 4.12, the Proposed Action has the potential to result in impacts to vegetation communities, burrowing owls, flat tailed horned lizard, nesting raptors, migratory birds and other sensitive non-migratory bird species, and jurisdictional waters. However, with the implementation of Mitigation Measures B1 through B7, as discussed in EIR/EA Section 4.12, these impacts would be reduced to a level less than significant under CEQA.

6.1.3.9 Paleontological Resources

As discussed in EIR/EA Section 4.13, according to the BLM's PFYC System, the lakebed deposits of ancient Lake Cahuilla located within the project site is identified as Class 4b. Class 4b is defined by the BLM as an area underlain by geologic units with high potential to yield fossils but have lowered risks of human-caused adverse impacts and/or lowered risk of natural degradation due to alluvial material, or other conditions that may lessen or prevent potential impacts to the bedrock resulting from the activity. Management concern for paleontological resources in Class 4 is moderate to high, depending on the proposed action. For the Proposed Action, the management concern for paleontological resources is considered to be high. As such, paleontological resources potentially located on the project site could be adversely affected during construction of the solar energy facility and transmission lines as a result of disturbance by grading or construction activities; unauthorized, unmonitored excavations; unauthorized collection of fossil materials; dislodging of fossils from their preserved environment (fossils out of context); and/or physical damage of

fossil specimens. However, with the implementation of Mitigation Measures PR1 through PR5, provided below, paleontological resource impacts during construction would not be adverse under CEQA.

No significant impacts to paleontological resources under CEQA are anticipated during operation of the Proposed Action.

6.2 Alternative 1-Alternative Transmission Line Corridor

6.2.1 Significant Irreversible Environmental Changes

A. CEQA

Similar to the Proposed Action, several irreversible commitments of limited resources would result from implementation of the Alternative 1-Alternative Transmission Line Corridor. Such resources include, but are not limited to: the loss of lumber, sand, gravel, concrete, asphalt, petrochemical construction materials, steel, copper, lead and other metals, and water consumption.

However, the Alternative 1-Alternative Transmission Line Corridor would provide a clean, renewable energy resource. The Alternative 1-Alternative Transmission Line Corridor would implement many Federal, State, and Local goals and policies directed at moving away from reliance upon fossil fuels, and encouraging renewable energy. These goals and polices are identified in Chapter 1.0 of this EIR/EA. Moreover, the land proposed for the solar energy facility is subject to a long-term lease agreement. Under the lease agreement, the applicant is required to restore the land to its pre-project state at the end of the project term.

B. NEPA

Similar to the Proposed Action, the Imperial Solar Energy Center West would irretrievably commit resources over the 30-year life of the project under Alternative 1-Alternative Transmission Line Corridor. After 30 years, the project is planned to be decommissioned and the applicant is required to restore the land to its pre-project state. Some of the resources on the site could potentially be retrieved after the site has been decommissioned.

However, the project would provide a clean, renewable energy resource. Over the 30 year life of the project, this renewable energy project would contribute incrementally to the reduction in demand for fossil fuel use for electricity-generating purposes. Therefore, the incremental reduction in fossil fuels would be a positive effect of the commitment of nonrenewable resources.

6.2.2 Growth Inducing Impacts

Similar to the Proposed Action, the Alternative 1-Alternative Transmission Line Corridor is located within the unincorporated area of Imperial County. The Alternative 1-Alternative Transmission Line Corridor does not involve the development of permanent residences that would result in a direct population growth in the area. The Alternative 1-Alternative Transmission Line Corridor is the construction and operation of a solar facility and transmission line corridor. According to the Applicant, the construction workforce is expected to

reach a peak of approximately 285 temporary workers with hours generally between 7am and 3pm Monday through Friday. The construction of the Alternative 1-Alternative Transmission Line Corridor is expected to require approximately 17 months. After the construction of the Alternative 1-Alternative Transmission Line Corridor, no permanent construction workers would be hired. The project would only require the employment of four full-time personnel and one security guard for the operation of the solar facility. As such, the Alternative 1-Alternative Transmission Line Corridor would not induce substantial population growth in the area. The Alternative 1-Alternative Transmission Line Corridor will involve only the extension of electricity-related infrastructure off-site. This would be limited to the extension of the transmission lines from the solar energy facility to the Imperial Valley Substation. These transmission lines would serve regional energy needs, integrating into the grid, and would not be available to directly serve surrounding areas.

Similar to the Proposed Action, the Alternative 1-Alternative Transmission Line Corridor would not indirectly support population growth; rather, the development is a response to the State's need for renewable energy to meet its Renewable Portfolio Standard. Unlike a gas-fired power plant, the Alternative 1-Alternative Transmission Line Corridor is not being developed as a source of base-load power in response to growth in demand for electricity. The power generated would be added to the State's electricity grid with the intent that it would displace fossil fueled power plants and their associated environmental impacts.

The Alternative 1-Alternative Transmission Line Corridor would supply energy to accommodate and support existing demand and projected growth, but it would not foster any new growth because (1) the additional energy would be used to ease the burdens of meeting existing statewide energy demands within and beyond the area of the project; (2) the energy would be used to support already-projected growth; or, (3) the factors affecting growth are so diverse that any potential connection between additional energy production and growth would necessarily be too speculative and uncertain to merit further analysis.

Under CEQA, an EIR should consider potentially significant energy implications of a project. (See CEQA Guidelines Appendix F(II); Pub. Res. Code Section 21100(b)(3)). Under NEPA, indirect effects including growth-inducing effects must be analyzed. (See 40 CFR Section 1508.8(b). However, the relationship between the Proposed Action's increased electrical capacity and the growth-inducing impacts outside the surrounding area is too speculative and uncertain to warrant further analysis. When a project's growth-inducing impacts are speculative, the lead agency should consider 14 Cal Code Regs §15145, which provides that, if an impact is too speculative for evaluation, the agency should note this conclusion and terminate discussion of the impact. As the court explained in *Napa Citizens for Honest Gov't v. Napa County Board of Supervisors* (2001) 91 Cal. App.4th 342, 368: "Nothing in the Guidelines, or in the cases, requires more than a general analysis of projected growth." *Napa Citizens,* 91 CA4th at 369. The problem of uncertainty of the Proposed Action's growth-inducing effects cannot be resolved by collection of further data due to the diversity of factors affecting growth.

While this document has considered that the Alternative 1-Alternative Transmission Line Corridor, as an energy project, might foster regional growth, the particular growth that could be attributed to the Alternative 1-Alternative Transmission Line Corridor is unpredictable, given the multitude of variables at play,

including uncertainty about the nature, extent, and location of growth and the effect of other contributors to growth besides the Alternative 1-Alternative Transmission Line Corridor. No accurate and reliable data is available that could be used to predict the amount of growth outside the area that would result from the Alternative 1-Alternative Transmission Line Corridor's contribution of additional electrical capacity. Neither the BLM nor the County of Imperial has adopted a threshold of significance for determining when an energy project is growth-inducing. Further evaluation of this impact is not required under CEQA or NEPA.

Additionally, the project would not involve the development of any new roadways, new water systems, or sewer. Potable water would be trucked into the site to serve the Operations and Maintenance Building. The Operation and Maintenance Building will be served by a septic system. Therefore, infrastructure improvements to serve the project are limited and would not be available to serve surrounding areas. For these reasons, the project would not be growth-inducing.

6.2.3 Unavoidable Significant Environmental Impacts

Analysis of environmental impacts caused by the Alternative 1-Alternative Transmission Line Corridor has been performed, and is contained in Chapter 4.0. Where significant impacts have been identified, mitigation measures are proposed that when implemented, would reduce the impact to a level less than significant under CEQA. The following is a summary of the impacts and mitigation measures contained for each subject area in Chapter 4.0-Environmental Consequences. No unavoidable significant environmental impacts under CEQA were identified.

6.2.3.1 Land Use

The land use plans that are applicable to the project site include the County of Imperial General Plan, the County of Imperial Land Use Ordinance, Airport Land Use Compatibility Plan, Federal Land Management Act, 1976, California Desert Conservation Area Plan, and Yuha Basin Area of Critical Environmental Concern (ACEC) Management Plan and Flat-tailed Horned Lizard Rangewide Management Strategy. As discussed in EIR/EA Section 4.2, the Alternative 1-Alternative Transmission Line Corridor would not conflict with any of the abovementioned applicable land use plans. Therefore, no significant impact under CEQA is identified associated with this issue.

Potential impacts to biological resources will occur with implementation of the Alternative 1-Alternative Transmission Line Corridor. However, Mitigation Measures B2 through B3 and B9 have been identified to address potential direct and indirect impacts to biological resources located within the Yuha Basin Area of Critical Environmental Concern Management Plan.

6.2.3.2 Air Quality

As discussed in EIR/EA Section 4.4, neither the construction emissions, nor the increase in ADT as a result of the Alternative 1-Alternative Transmission Line Corridor, would result in a significant air quality impact under CEQA to the surrounding area. However, a significant impact under CEQA would result if the Grading Emissions phase were to remain unmitigated at the Tier 0 Baseline. With implementation of the Tier 2+ engine technology, NOx emissions do not exceed ICAPCD's threshold. Implementation of Mitigation Measures AQ1 and AQ2 would reduce this impact to a level less than significant under CEQA.

6.2.3.3 Greenhouse Gas Emissions

As discussed in EIR/EA Section 4.5, the estimated criteria pollutants generated during the construction and operation of the Alternative 1-Alternative Transmission Line Corridor would not exceed the CEQA threshold of 25,000 metric tons or more of CO_{2e} GHG emissions on an annual basis and the CAPCOA and CARB threshold of 900 metric tons of CO_2 per year. However, the Alternative 1-Alternative Transmission Line Corridor shall demonstrate that it has policies in place that would assist in providing a statewide reduction in CO_2. The greenhouse gas offset measures provided in EIR/EA Section 4.5 have been shown to be effective by CARB and should be implemented wherever possible.

6.2.3.4 Geology/Soils and Mineral Resources

As discussed in EIR/EA Section 4.6, the Alternative 1-Alternative Transmission Line Corridor project site is likely to be subject to at least one moderate earthquake during the design of the structures. However, the Alternative 1-Alternative Transmission Line Corridor must comply with the most recent California Building Code Requirements.

The site-specific geology impacts that have the potential to occur on the project site include differential settlement, and the presence of expansive and corrosive soils. These geology impacts are considered significant under CEQA. However, with the implementation of Mitigation Measure GS1, these impacts would be reduced to a level less than significant under CEQA.

6.2.3.5 Cultural Resources

As discussed in EIR/EA Section 4.7, 16 sites are located within the Alternative 1-Alternative Transmission Line Corridor APE. Of the 16 sites within the project APE, three sites would be directly impacted during construction of the Alternative 1-Alternative Transmission Line Corridor. Ten sites would be indirectly impacted due to increased traffic and the potential increase in the amount of runoff during rainfall events. In addition, during operation of the Alternative 1-Alternative Transmission Line Corridor, repairs to buried utilities or other buried infrastructure could require the excavation of trenches or large pits. Subsurface excavation activities always have some potential to impact previously unknown archaeological subsurface resources. Furthermore, during construction and operational repair of the Alternative 1-Alternative Transmission Line Corridor, grading, excavation and trenching will be required. There is a potential impact that human remains may be disturbed. With the implementation of Mitigation Measures CR1 through CR4, these cultural resources impacts would be reduced to a level less than significant under CEQA.

6.2.3.6 Health, Safety and Hazardous Materials/Fire and Fuels Management

As discussed in EIR/EA Section 4.10, the project site contains some areas where hazardous materials may be present. These include the potential presence of pesticide/herbicide residue and scattered trash and debris. None of these appear to represent a substantial health risk on the project site and to the surrounding area, and with the implementation of recommended Mitigation Measures HM1 and HM2, potential impacts will be reduced to a level less than significant under CEQA.

6.2.3.7 *Hydrology and Water Quality*

As discussed in EIR/EA Section 4.11, the Alternative 1-Alternative Transmission Line Corridor would not result in a significant hydrology impact under CEQA. Onsite drainage will be designed to replicate the existing conditions and the project site will maintain all existing condition points of discharge. The construction of drainage infrastructure will reduce peak flow rates.

Contamination associated with urban non-point source pollution could enter the on-site detention basins as a result of construction or post-construction-related activities, resulting in potentially significant water quality impacts under CEQA. However, with the implementation of Mitigation Measure HWQ1, potential impacts will be reduced to a level less than significant under CEQA.

6.2.3.8 *Biological Resources*

As discussed in EIR/EA Section 4.12, the Alternative 1-Alternative Transmission Line Corridor has the potential to result in impacts to vegetation communities, burrowing owls, flat tailed horned lizard, nesting raptors, migratory birds and other sensitive non-migratory bird species, and jurisdictional waters. However, with the implementation of Mitigation Measures B2 through B7 and B8 through B9 as discussed in EIR/EA Section 4.12, these impacts would be reduced to a level less than significant under CEQA.

6.2.3.9 *Paleontological Resources*

As discussed in EIR/EA Section 4.13, the construction of Alternative 1-Alternative Transmission Line Corridor would result in the same impacts to paleontological resources as the Proposed Action because the total area disturbed for Alternative 1-Alternative Transmission Line Corridor is very similar to the Proposed Action. The implementation of Mitigation Measures PR1 through PR5 for the Proposed Action would apply to Alternative 1-Alternative Transmission Line Corridor and are intended to ensure that the paleontological resource impacts that may occur during the construction of this alternative would not be adverse under CEQA.

Similar to the Proposed Action, no significant impacts to paleontological resources under CEQA are anticipated during operation of Alternative 1-Alternative Transmission Line Corridor.

6.3 Alternative 2-Alternative Transmission Line Corridor

6.3.1 *Significant Irreversible Environmental Changes*

A. CEQA

Similar to the Proposed Action, several irreversible commitments of limited resources would result from implementation of the Alternative 2-Alternative Transmission Line Corridor. Such resources include, but are not limited to: the loss of lumber, sand, gravel, concrete, asphalt, petrochemical construction materials, steel, copper, lead and other metals, and water consumption.

However, the Alternative 2-Alternative Transmission Line Corridor would provide a clean, renewable energy resource. The Alternative 2-Alternative Transmission Line Corridor would implement many Federal, State,

and Local goals and policies directed at moving away from reliance upon fossil fuels, and encouraging renewable energy. These goals and polices are identified in Chapter 1.0 of this EIR/EA. Moreover, the land proposed for the solar energy facility is subject to a long-term lease agreement. Under the lease agreement, the applicant is required to restore the land to its pre-project state at the end of the project term.

B. NEPA

Similar to the Proposed Action, the Imperial Solar Energy Center West would irretrievably commit resources over the 30-year life of the project under Alternative 2-Alternative Transmission Line Corridor. After 30 years, the project is planned to be decommissioned and the applicant is required to restore the land to its pre-project state. Some of the resources on the site could potentially be retrieved after the site has been decommissioned.

However, the project would provide a clean, renewable energy resource. Over the 30 year life of the project, this renewable energy project would contribute incrementally to the reduction in demand for fossil fuel use for electricity-generating purposes. Therefore, the incremental reduction in fossil fuels would be a positive effect of the commitment of nonrenewable resources.

6.3.2 Growth Inducing Impacts

Similar to the Proposed Action, the Alternative 2-Alternative Transmission Line Corridor is located within the unincorporated area of Imperial County. The Alternative 2-Alternative Transmission Line Corridor does not involve the development of permanent residences that would result in a direct population growth in the area. The Alternative 2-Alternative Transmission Line Corridor is the construction and operation of a solar facility and transmission line corridor. According to the Applicant, the construction workforce is expected to reach a peak of approximately 285 temporary workers with hours generally between 7am and 3pm Monday through Friday. The construction of the Alternative 2-Alternative Transmission Line Corridor is expected to require approximately 17 months. After the construction of the Alternative 2-Alternative Transmission Line Corridor, no permanent construction workers would be hired. The project would only require the employment of four full-time personnel and one security guard for the operation of the solar facility. As such, the Alternative 2-Alternative Transmission Line Corridor would not induce substantial population growth in the area. The Alternative 2-Alternative Transmission Line Corridor will involve only the extension of electricity-related infrastructure off-site. This would be limited to the extension of the transmission lines from the solar energy facility to the Imperial Valley Substation. These transmission lines would serve regional energy needs, integrating into the grid, and would not be available to directly serve surrounding areas.

Similar to the Proposed Action, the Alternative 2-Alternative Transmission Line Corridor would not indirectly support population growth; rather, the development is a response to the State's need for renewable energy to meet its Renewable Portfolio Standard. Unlike a gas-fired power plant, the Alternative 2-Alternative Transmission Line Corridor is not being developed as a source of base-load power in response to growth in demand for electricity. The power generated would be added to the State's electricity grid with the intent that it would displace fossil fueled power plants and their associated environmental impacts.

The Alternative 2-Alternative Transmission Line Corridor would supply energy to accommodate and support existing demand and projected growth, but it would not foster any new growth because (1) the additional energy would be used to ease the burdens of meeting existing statewide energy demands within and beyond the area of the project; (2) the energy would be used to support already-projected growth; or, (3) the factors affecting growth are so diverse that any potential connection between additional energy production and growth would necessarily be too speculative and uncertain to merit further analysis.

Under CEQA, an EIR should consider potentially significant energy implications of a project. (See CEQA Guidelines Appendix F(II); Pub. Res. Code Section 21100(b)(3)). Under NEPA, indirect effects including growth-inducing effects must be analyzed. (See 40 CFR Section 1508.8(b). However, the relationship between the Proposed Action's increased electrical capacity and the growth-inducing impacts outside the surrounding area is too speculative and uncertain to warrant further analysis. When a project's growth-inducing impacts are speculative, the lead agency should consider 14 Cal Code Regs §15145, which provides that, if an impact is too speculative for evaluation, the agency should note this conclusion and terminate discussion of the impact. As the court explained in *Napa Citizens for Honest Gov't v. Napa County Board of Supervisors* (2001) 91 Cal. App.4th 342, 368: "Nothing in the Guidelines, or in the cases, requires more than a general analysis of projected growth." *Napa Citizens, 91* CA4th at 369. The problem of uncertainty of the Proposed Action's growth-inducing effects cannot be resolved by collection of further data due to the diversity of factors affecting growth.

While this document has considered that the Alternative 2-Alternative Transmission Line Corridor, as an energy project, might foster regional growth, the particular growth that could be attributed to the Alternative 2-Alternative Transmission Line Corridor is unpredictable, given the multitude of variables at play, including uncertainty about the nature, extent, and location of growth and the effect of other contributors to growth besides the Alternative 2-Alternative Transmission Line Corridor. No accurate and reliable data is available that could be used to predict the amount of growth outside the area that would result from the Alternative 2-Alternative Transmission Line Corridor's contribution of additional electrical capacity. Neither the BLM nor the County of Imperial has adopted a threshold of significance for determining when an energy project is growth-inducing. Further evaluation of this impact is not required under CEQA or NEPA.

Additionally, the project would not involve the development of any new roadways, new water systems, or sewer. Potable water would be trucked into the site to serve the Operations and Maintenance Building. The Operation and Maintenance Building will be served by a septic system. Therefore, infrastructure improvements to serve the project are limited and would not be available to serve surrounding areas. For these reasons, the project would not be growth-inducing.

6.3.3 *Unavoidable Significant Environmental Impacts*

Analysis of environmental impacts caused by the Alternative 2-Alternative Transmission Line Corridor has been performed, and is contained in Chapter 4.0. Where significant impacts have been identified, mitigation measures are proposed that when implemented, would reduce the impact to a level less than significant. The following is a summary of the impacts and mitigation measures contained for each subject

area in Chapter 4.0-Environmental Consequences. No unavoidable significant environmental impacts under CEQA were identified.

6.3.3.1 Land Use

The land use plans that are applicable to the project site include the County of Imperial General Plan, the County of Imperial Land Use Ordinance, Airport Land Use Compatibility Plan, Federal Land Management Act, 1976, California Desert Conservation Area Plan, and Yuha Basin Area of Critical Environmental Concern (ACEC) Management Plan and Flat-tailed Horned Lizard Rangewide Management Strategy. As discussed in EIR/EA Section 4.2, the Alternative 2-Alternative Transmission Line Corridor would not conflict with any of the abovementioned applicable land use plans. Therefore, no significant impact under CEQA is identified associated with this issue.

Potential impacts to biological resources will occur with implementation of the Alternative 2-Alternative Transmission Line Corridor. However, Mitigation Measures B2 through B3 and B11 have been identified to address potential direct and indirect impacts to biological resources located within the Yuha Basin Area of Critical Environmental Concern Management Plan.

6.3.3.2 Air Quality

As discussed in EIR/EA Section 4.4, neither the construction emissions, nor the increase in ADT as a result of the Alternative 2-Alternative Transmission Line Corridor, would result in a significant air quality impact under CEQA to the surrounding area. However, a significant impact under CEQA would result if the Grading Emissions phase were to remain unmitigated at the Tier 0 Baseline. With implementation of the Tier 2+ engine technology, NOx emissions would not exceed ICAPCD's threshold. Implementation of Mitigation Measures AQ1 and AQ2 would reduce this impact to a level less than significant under CEQA.

6.3.3.3 Greenhouse Gas Emissions

As discussed in EIR/EA Section 4.5, the estimated criteria pollutants generated during the construction and operation of the Alternative 2-Alternative Transmission Line Corridor would not exceed the CEQA threshold of 25,000 metric tons or more of CO_{2e} GHG emissions on an annual basis and the CAPCOA and CARB threshold of 900 metric tons of CO_2 per year. However, the Alternative 2-Alternative Transmission Line Corridor shall demonstrate that it has policies in place that would assist in providing a statewide reduction in CO_2. The greenhouse gas offset measures provided in EIR/EA Section 4.5 have been shown to be effective by CARB and should be implemented wherever possible.

6.3.3.4 Geology/Soils and Mineral Resources

As discussed in EIR/EA Section 4.6, the Alternative 2-Alternative Transmission Line Corridor project site is likely to be subject to at least one moderate earthquake during the design of the structures. However, the Alternative 2-Alternative Transmission Line Corridor must comply with the most recent California Building Code Requirements.

The site-specific geology impacts that have the potential to occur on the project site include differential settlement, and the presence of expansive and corrosive soils. These geology impacts are considered

significant under CEQA. However, with the implementation of Mitigation Measure GS1, these impacts would be reduced to a level less than significant under CEQA.

6.3.3.5 Cultural Resources

As discussed in EIR/EA Section 4.7, 27 sites are located within the Alternative 2-Alternative Transmission Line Corridor APE. Of the 27 sites within the project APE, six sites would be directly impacted during construction of the Alternative 2-Alternative Transmission Line Corridor. Seven sites would be indirectly impacted due to increased traffic and the potential increase in the amount of runoff during rainfall events. In addition, during operation of the Alternative 2-Alternative Transmission Line Corridor, repairs to buried utilities or other buried infrastructure could require the excavation of trenches or large pits. Subsurface excavation activities always have some potential to impact previously unknown archaeological subsurface resources. Furthermore, during construction and operational repair of the Alternative 2-Alternative Transmission Line Corridor, grading, excavation and trenching will be required. There is a potential impact that human remains may be disturbed. With the implementation of Mitigation Measures CR1 through CR4, these cultural resources impacts would be reduced to a level less than significant under CEQA.

6.3.3.6 Health, Safety and Hazardous Materials/Fire and Fuels Management

As discussed in EIR/EA Section 4.10, the project site contains some areas where hazardous materials may be present. These include the potential presence of pesticide/herbicide residue and scattered trash and debris. None of these appear to represent a substantial health risk on the project site and to the surrounding area, and with the implementation of recommended Mitigation Measures HM1 and HM2, potential impacts will be reduced to a level less than significant under CEQA.

6.3.3.7 Hydrology and Water Quality

As discussed in EIR/EA Section 4.11, the Alternative 2-Alternative Transmission Line Corridor would not result in a significant hydrology impact under CEQA. Onsite drainage will be designed to replicate the existing conditions and the project site will maintain all existing condition points of discharge. The construction of drainage infrastructure will reduce peak flow rates.

Contamination associated with urban non-point source pollution could enter the on-site detention basins as a result of construction or post-construction-related activities, resulting in potentially significant water quality impacts under CEQA. However, with the implementation of Mitigation Measure HWQ1, potential impacts will be reduced to a level less than significant under CEQA.

6.3.3.8 Biological Resources

As discussed in EIR/EA Section 4.12, the Alternative 2-Alternative Transmission Line Corridor has the potential to result in impacts to vegetation communities, burrowing owls, flat tailed horned lizard, nesting raptors, migratory birds and other sensitive non-migratory bird species, and jurisdictional waters. However, with the implementation of Mitigation Measures B2 through B7 and B10 through B12 as discussed in EIR/EA Section 4.12, these impacts would be reduced to a level less than significant under CEQA.

6.3.3.9 *Paleontological Resources*

As discussed in EIR/EA Section 4.13, the construction of Alternative 2-Alternative Transmission Line Corridor would result in the same impacts to paleontological resources as the Proposed Action because the total area disturbed for Alternative 2-Alternative Transmission Line is very similar to the Proposed Action. The implementation of Mitigation Measures PR1 through PR5 for the Proposed Action would apply to Alternative 2-Alternative Transmission Line Corridor and are intended to ensure that the paleontological resource impacts that may occur during the construction of this alternative would not be adverse under CEQA.

Similar to the Proposed Action, no significant impacts to paleontological resources under CEQA are anticipated during operation of Alternative 2-Alternative Transmission Line Corridor.

6.4 Alternative 3-Reduced Solar Energy Facility Site

6.4.1 *Significant Irreversible Environmental Changes*

A. CEQA

Similar to the Proposed Action, several irreversible commitments of limited resources would result from implementation of the Alternative 3-Reduced Solar Energy Facility Site. Such resources include, but are not limited to: the loss of lumber, sand, gravel, concrete, asphalt, petrochemical construction materials, steel, copper, lead and other metals, and water consumption.

However, the Alternative 3-Reduced Solar Energy Facility Site would provide a clean, renewable energy resource. The Alternative 3-Reduced Solar Energy Facility Site would implement many Federal, State, and Local goals and policies directed at moving away from reliance upon fossil fuels, and encouraging renewable energy. These goals and polices are identified in Chapter 1.0 of this EIR/EA. Moreover, the land proposed for the solar energy facility is subject to a long-term lease agreement. Under the lease agreement, the applicant is required to restore the land to its pre-project state at the end of the project term.

B. NEPA

Similar to the Proposed Action, the Imperial Solar Energy Center West would irretrievably commit resources over the 30-year life of the project under Alternative 3-Reduced Solar Energy Facility Site. After 30 years, the project is planned to be decommissioned and the applicant is required to restore the land to its pre-project state. Some of the resources on the site could potentially be retrieved after the site has been decommissioned.

However, the project would provide a clean, renewable energy resource. Over the 30 year life of the project, this renewable energy project would contribute incrementally to the reduction in demand for fossil fuel use for electricity-generating purposes. Therefore, the incremental reduction in fossil fuels would be a positive effect of the commitment of nonrenewable resources.

6.4.2 Growth Inducing Impacts

Similar to the Proposed Action, the Alternative 3-Reduced Solar Energy Facility Site is located within the unincorporated area of Imperial County. The Alternative 3-Reduced Solar Energy Facility Site does not involve the development of permanent residences that would result in a direct population growth in the area. The Alternative 3-Reduced Solar Energy Facility Site is the construction and operation of a solar facility and transmission line corridor. According to the Applicant, the construction workforce is expected to reach a peak of approximately 285 temporary workers with hours generally between 7am and 3pm Monday through Friday. The construction of the Alternative 3-Reduced Solar Energy Facility Site is expected to require approximately 17 months. After the construction of the Alternative 3-Reduced Solar Energy Facility Site, no permanent construction workers would be hired. The project would only require the employment of four full-time personnel and one security guard for the operation of the solar facility. As such, the Alternative 3-Reduced Solar Energy Facility Site would not induce substantial population growth in the area. The Alternative 3-Reduced Solar Energy Facility Site will involve only the extension of electricity-related infrastructure off-site. This would be limited to the extension of the transmission lines from the solar energy facility to the Imperial Valley Substation. These transmission lines would serve regional energy needs, integrating into the grid, and would not be available to directly serve surrounding areas.

Similar to the Proposed Action, the Alternative 3-Reduced Solar Energy Facility Site would not indirectly support population growth; rather, the development is a response to the State's need for renewable energy to meet its Renewable Portfolio Standard. Unlike a gas-fired power plant, the Alternative 3-Reduced Solar Energy Facility Site is not being developed as a source of base-load power in response to growth in demand for electricity. The power generated would be added to the State's electricity grid with the intent that it would displace fossil fueled power plants and their associated environmental impacts.

The Alternative 3-Reduced Solar Energy Facility Site would supply energy to accommodate and support existing demand and projected growth, but it would not foster any new growth because (1) the additional energy would be used to ease the burdens of meeting existing statewide energy demands within and beyond the area of the project; (2) the energy would be used to support already-projected growth; or, (3) the factors affecting growth are so diverse that any potential connection between additional energy production and growth would necessarily be too speculative and uncertain to merit further analysis.

Under CEQA, an EIR should consider potentially significant energy implications of a project. (See CEQA Guidelines Appendix F(II); Pub. Res. Code Section 21100(b)(3)). Under NEPA, indirect effects including growth-inducing effects must be analyzed. (See 40 CFR Section 1508.8(b). However, the relationship between the Proposed Action's increased electrical capacity and the growth-inducing impacts outside the surrounding area is too speculative and uncertain to warrant further analysis. When a project's growth-inducing impacts are speculative, the lead agency should consider 14 Cal Code Regs §15145, which provides that, if an impact is too speculative for evaluation, the agency should note this conclusion and terminate discussion of the impact. As the court explained in *Napa Citizens for Honest Gov't v. Napa County Board of Supervisors* (2001) 91 Cal. App.4th 342, 368: "Nothing in the Guidelines, or in the cases, requires more than a general analysis of projected growth." *Napa Citizens, 91* CA4th at 369. The problem

of uncertainty of the Proposed Action's growth-inducing effects cannot be resolved by collection of further data due to the diversity of factors affecting growth.

While this document has considered that the Alternative 3-Reduced Solar Energy Facility Site, as an energy project, might foster regional growth, the particular growth that could be attributed to the Alternative 3-Reduced Solar Energy Facility Site is unpredictable, given the multitude of variables at play, including uncertainty about the nature, extent, and location of growth and the effect of other contributors to growth besides the Alternative 3-Reduced Solar Energy Facility Site. No accurate and reliable data is available that could be used to predict the amount of growth outside the area that would result from the Alternative 3-Reduced Solar Energy Facility Site's contribution of additional electrical capacity. Neither the BLM nor the County of Imperial has adopted a threshold of significance for determining when an energy project is growth-inducing. Further evaluation of this impact is not required under CEQA or NEPA.

Additionally, the project would not involve the development of any new roadways, new water systems, or sewer. Potable water would be trucked into the site to serve the Operations and Maintenance Building. The Operation and Maintenance Building will be served by a septic system. Therefore, infrastructure improvements to serve the project are limited and would not be available to serve surrounding areas. For these reasons, the project would not be growth-inducing.

6.4.3 Unavoidable Significant Environmental Impacts

Analysis of environmental impacts caused by the Alternative 3-Reduced Solar Energy Facility Site has been performed, and is contained in Chapter 4.0. Where significant impacts have been identified, mitigation measures are proposed that when implemented, would reduce the impact to a level less than significant. The following is a summary of the impacts and mitigation measures contained for each subject area in Chapter 4.0-Environmental Consequences. No unavoidable significant environmental impacts under CEQA were identified.

6.4.3.1 Land Use

The land use plans that are applicable to the project site include the County of Imperial General Plan, the County of Imperial Land Use Ordinance, Airport Land Use Compatibility Plan, Federal Land Management Act, 1976, California Desert Conservation Area Plan, and Yuha Basin Area of Critical Environmental Concern (ACEC) Management Plan and Flat-tailed Horned Lizard Rangewide Management Strategy. As discussed in EIR/EA Section 4.2, the Alternative 3-Reduced Solar Energy Facility Site would not conflict with any of the abovementioned applicable land use plans. Therefore, no significant impact under CEQA is identified associated with this issue.

Potential impacts to biological resources will occur with implementation of the Alternative 3-Reduced Solar Energy Facility Site. However, Mitigation Measures B2 through B3 and B14 have been identified to address potential direct and indirect impacts to biological resources located within the Yuha Basin Area of Critical Environmental Concern Management Plan.

6.4.3.2 Air Quality

As discussed in EIR/EA Section 4.4, neither the construction emissions, nor the increase in ADT as a result of the Alternative 3-Reduced Solar Energy Facility Site, would result in a significant air quality impact under CEQA to the surrounding area. However, a significant impact under CEQA would result if the Grading Emissions phase were to remain unmitigated at the Tier 0 Baseline. With implementation of the Tier 2+ engine technology, NOx emissions would not exceed ICAPCD's threshold. Implementation of Mitigation Measures AQ1 and AQ2 would reduce this impact to a level less than significant under CEQA.

6.4.3.3 Greenhouse Gas Emissions

As discussed in EIR/EA Section 4.5, the estimated criteria pollutants generated during the construction and operation of the Alternative 3-Reduced Solar Energy Facility Site would not exceed the CEQA threshold of 25,000 metric tons or more of CO_{2e} GHG emissions on an annual basis and the CAPCOA and CARB threshold of 900 metric tons of CO_2 per year. However, the Alternative 3-Reduced Solar Energy Facility Site shall demonstrate that it has policies in place that would assist in providing a statewide reduction in CO_2. The greenhouse gas offset measures provided in EIR/EA Section 4.5 have been shown to be effective by CARB and should be implemented wherever possible.

6.4.3.4 Geology/Soils and Mineral Resources

As discussed in EIR/EA Section 4.6, the Alternative 3-Reduced Solar Energy Facility Site project site is likely to be subject to at least one moderate earthquake during the design of the structures. However, the Alternative 3-Reduced Solar Energy Facility Site must comply with the most recent California Building Code Requirements.

The site-specific geology impacts that have the potential to occur on the project site include differential settlement, and the presence of expansive and corrosive soils. These geology impacts are considered significant under CEQA. However, with the implementation of Mitigation Measure GS1, these impacts would be reduced to a level less than significant under CEQA.

6.4.3.5 Cultural Resources

As discussed in EIR/EA Section 4.7, the Alternative 3-Reduced Solar Energy Facility Site is similar to the Proposed Action and differs only in the reduced solar energy facility thereby avoiding potential impacts to three newly identified sites. There are a total of 13 sites within the Alternative 3-Reduced Solar Energy Facility Site APE. Of the 13 sites within the project APE, no sites would be directly impacted during the construction of the Alternative 3-Reduced Solar Energy Facility Site. The same eleven sites as the Proposed Action would be indirectly impacted due to increased traffic and the potential increase in the amount of runoff during rainfall events. In addition, during operation of the Alternative 3-Reduced Solar Energy Facility Site, repairs to buried utilities or other buried infrastructure could require the excavation of trenches or large pits. Subsurface excavation activities always have some potential to impact previously unknown archaeological subsurface resources. Furthermore, during construction and operational repair of the Alternative 3-Reduced Solar Energy Facility Site, grading, excavation and trenching will be required. There is a potential impact that human remains may be disturbed. With the implementation of Mitigation

Measures CR1 through CR4, these cultural resources impacts would be reduced to a level less than significant under CEQA.

6.4.3.6 Health, Safety and Hazardous Materials/Fire and Fuels Management

As discussed in EIR/EA Section 4.10, the project site contains some areas where hazardous materials may be present. These include the potential presence of pesticide/herbicide residue and scattered trash and debris. None of these appear to represent a substantial health risk on the project site and to the surrounding area, and with the implementation of recommended Mitigation Measures HM1 and HM2, potential impacts will be reduced to a level less than significant under CEQA.

6.4.3.7 Hydrology and Water Quality

As discussed in EIR/EA Section 4.11, the Alternative 3-Reduced Solar Energy Facility Site would not result in a significant hydrology impact. Onsite drainage will be designed to replicate the existing conditions and the project site will maintain all existing condition points of discharge. The construction of drainage infrastructure will reduce peak flow rates.

Contamination associated with urban non-point source pollution could enter the on-site detention basins as a result of construction or post-construction-related activities, resulting in potentially significant water quality impacts under CEQA. However, with the implementation of Mitigation Measure HWQ1, potential impacts will be reduced to a level less than significant under CEQA.

6.4.3.8 Biological Resources

As discussed in EIR/EA Section 4.12, the Alternative 3-Reduced Solar Energy Facility Site has the potential to result in impacts to vegetation communities, burrowing owls, flat tailed horned lizard, nesting raptors, migratory birds and other sensitive non-migratory bird species, and jurisdictional waters. However, with the implementation of Mitigation Measures B2 through B7 and B13 through B14 as discussed in EIR/EA Section 4.12, these impacts would be reduced to a level less than significant under CEQA.

6.4.3.9 Paleontological Resources

As discussed in EIR/EA Section 4.13, the construction of Alternative 3-Reduced Solar Energy Facility Site would result in the same impacts to paleontological resources as the Proposed Action because the total area disturbed for Alternative 3-Reduced Solar Energy Facility Site, although reduced in size, impacts to paleontological resources potentially located on the project site would be similar to the Proposed Action. The implementation of Mitigation Measures PR1 through PR5 for the Proposed Action would apply to Alternative 3-Reduced Solar Energy Facility Site and are intended to ensure that the paleontological resource impacts that may occur during the construction of this alternative would not be adverse under CEQA.

Similar to the Proposed Action, no significant impacts to paleontological resources under CEQA are anticipated during operation of Alternative 3-Reduced Solar Energy Facility Site.

6.5 Alternative 4-No Action/No Project Alternative

No development would occur under the Alternative 4-No Action/No Project Alternative. Therefore, no effects related to significant irreversible environmental changes, growth inducing impacts, and unavoidable significant environmental impacts would result from the Alternative 4-No Action/No Project Alternative.